

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A manufacturing method of a multilayer circuit board, comprising the step of forming at least two wiring layers, an inter-layer insulating film provided between every adjacent two of the wiring layers, and conductive posts for providing electrical conductivity between the wiring layers, wherein:

said step includes forming the inter-layer insulating film ~~by changing the film thickness of the inter-layer insulating film according to a concavo-convex shape of an area where the inter-layer insulating film is formed, so as to level an upper surface of the inter-layer insulating film~~by using a droplet jetting method after the conductive posts are formed

~~wherein the inter-layer insulating film is formed by using a droplet jetting method and the formation of the inter-layer insulating film includes at least a first step of forming an inter-layer insulating film whose film thickness is changed so as to completely fill concave portions in the concavo-convex shape with the insulating film through a single ink-jetting operation over the area where the inter-layer insulating film is formed so that the inter-layer insulating film has a flat upper surface, and the upper surfaces of the conductive posts are higher than the upper surface of the inter-layer insulating film.~~

2. (Cancelled)

3. (Currently Amended) The manufacturing method as claimed in claim 1, wherein ~~the concavo-convex shape of the area~~ concavo-convex shape of an area where the inter-layer insulating film is formed is computed based on design data of a circuit pattern for forming the wiring layers and the conductive posts.

4. (Previously Presented) The manufacturing method as claimed in claim 1, wherein the concavo-convex shape of the area where the inter-layer insulating film is formed is measured before the inter-layer insulating film is formed.

5. (Currently Amended) The manufacturing method as claimed in claim 1, wherein the step of forming the inter-layer insulating film includes forming a plurality of the inter-layer insulating films which are stacked in turn, and this step includes the steps of:

forming the first inter-layer insulating film ~~having a film thickness which is changed by changing the amount of ink material jetted per unit area~~ according to the a concavo-convex shape of ~~the an~~ an area where the inter-layer insulating film is formed, where the concavo-convex shape is computed by design data of a circuit pattern for forming the wiring layers and the conductive posts; and

measuring steps in an upper surface of the first inter-layer insulating film and forming the second inter-layer insulating film ~~so in a manner such~~ that concave portions in the steps are filled with the second inter-layer insulating film.

6. (Previously Presented) The manufacturing method as claimed in claim 5, wherein

the first inter-layer insulating film is formed by jetting relatively large droplets from a droplet jetting head, and the second inter-layer insulating film is formed by jetting droplets, which are smaller than said relatively large droplets, from the droplet jetting head.

7. (Previously Presented) The manufacturing method as claimed in claim 1, wherein in the droplet jetting method, the amount of ink material jetted per unit area is controlled by adjusting the amount jetted per droplet of the ink material, where the amount jetted per droplet is changed by controlling a driving waveform for a droplet jetting head.

8. (Previously Presented) The manufacturing method as claimed in claim 1, wherein in the droplet jetting method, the amount of ink material jetted per unit area is controlled by adjusting distance intervals between positions where the ink material is jetted.

9. (New) The manufacturing method as claimed in claim 1, wherein the formation of the inter-layer insulating film includes at least a first step of changing the amount of ink material jetted per unit area so as to completely fill concave portions in a concavo-convex shape of an area where the inter-layer insulating film is formed,

with the insulating film through a single ink-jetting operation over the area where the inter-layer insulating film is formed.

10. (New) The manufacturing method as claimed in claim 1, wherein a second inter-layer insulating film is formed so as to fill concave portions, which are formed by the flat upper surface of the inter-layer insulating film and side faces of the conductive posts, with the second inter-layer insulating film so that the upper surfaces of the conductive posts are slightly higher than the upper surface of the second inter-layer insulating film.